

maleimide-terminated oligomer, (iii) a homopolymer comprising a maleimide-terminated polymer, (iv) a copolymer comprising a bismaleimide, (v) a copolymer comprising a maleimide-terminated oligomer, and (vi) a copolymer comprising a maleimide-terminated polymer;

wherein the coating is applied from an aqueous solution, an organic solvent solution, a dispersion or an emulsion;

(c) stabilizing the bond coating on the substrate surface by heat or irradiation; and

(d) applying at least one paint coating on the substrate.--

Please cancel Claims 52-54 without prejudice or disclaimer.

#### REMARKS

The Examiner objected to the specification on the ground that new matter was added to the claims. This objection to the specification is respectfully traversed. It is respectfully pointed out that if there is new matter in the claims, it is the claims which should be addressed. Since the specification was never amended, an objection to the specification is improper and should be withdrawn.

The Examiner rejected the claims under 35 U.S.C. § 112, first paragraph, based on the assertion that new matter was added to the claims. This rejection is now moot since the asserted new matter has been deleted from claims 28 and 31.

The Examiner rejected claims 28-30, 32-35, 38-47, 50, and 52-54 under 35 U.S.C. § 103(a) as unpatentable over Sugio, et al. in view of Sachdeva. The

Examiner's position is that Sugio, et al. disclose everything being claimed except for the recited thickness or pre-coating steps. Sachdeva is cited for a teaching that it is known to clean and degrease metal substrates prior to applying corrosion-inhibiting adhesive primers. This rejection is respectfully traversed.

Sugio, et al. disclose a resin which, in addition to the maleimide component, must also contain a polyphenylenether resin and an epoxy compound. The instant claims are drawn to a method for corrosion proofing a metal substrate by applying a bond coating which consists essentially of a polybismaleimide as defined in the claims. Accordingly, the Sugio, et al. reference which requires additional significant ingredients does not teach what is being claimed. Sachdeva does not cure the defects in the primary reference. This rejection, therefore, should be withdrawn.

The Examiner rejected claims 28-30, 32-50, and 52-54 under 35 U.S.C. § 103(a) as unpatentable over Lienert, et al. in view of Sachdeva. Again, the Examiner's position is that Lienert, et al. teach everything except the cleaning steps and Sachdeva is cited for that teaching. This rejection is respectfully traversed.

Lienert, et al. disclose a complicated formulation for several components of which only one is a polybismaleimide. As with Sugio, et al., this reference does not teach the use of a polybismaleimide alone. Sachdeva does not cure the defect in the primary reference. The Examiner is, therefore, respectfully requested to withdraw this rejection.

The Examiner rejected claims 28-31, 34, 35, 38-41, and 47-54 under 35 U.S.C. § 103(a) as unpatentable over Suzuki, et al. (misspelled in the action as

“Suzuki et al.”) in view of Sachdeva. The Examiner considered that Suzuki, et al. teach everything except the cleaning step and that is taught by Sachdeva. This rejection is respectfully traversed.

In the Suzuki, et al. reference, the polybismaleimide serves as the “auxiliary adhesive agent” in a formulation comprising fluorene containing polymers which serve as an undercoat (“undercoating composition”) for fluorocarbon polymers. See column 5, lines 18-35, and column 1, line 56-column 2, line 8. Here it is stated explicitly that the adhesive agent is a tetrafluoroethylene polymer that is quite specifically modified. The polybismaleimide is only one additive among several to which this key meaning is inapplicable. Sachdeva does not cure the defects in the primary reference so this rejection should also be withdrawn.

The Examiner rejected claims 28-31, 34, 35, 38-41, and 47-54 under 35 U.S.C. § 103(a) as unpatentable over Ng in view of Sachdeva. Again, the Examiner’s position is that Ng teaches everything except pre-coating steps and these are taught by Sachdeva. This rejection is respectfully traversed.

Ng discloses a corrosion protecting and adhesion promoting coating that contains, as another important component, a water-soluble epoxy resin. The epoxy component is absolutely essential. Thus, Ng does not teach what is being claimed in the instant application and Sachdeva does not cure that defect. This rejection should, therefore, be withdrawn.

The common feature of all of the references is that they disclose substances that necessarily contain an organic component without a maleimide structure. In contrast, the instantly claimed invention is to a process in which

only maleimide-containing components are used. This is not taught or suggested by any of the cited references. The Examiner is, therefore, respectfully requested to withdraw all the rejections.

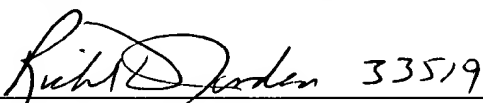
Since all the claims are clearly in condition for allowance and distinguish over the prior art of record, whether taken singly or in combination, an early Notice of Allowance is in order and the same is most earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #225/44173).

Respectfully submitted,

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**APPENDIX**  
**IN THE CLAIMS**

Please amend Claims 28 and 31 as follows:

--28. (Twice amended) A method for corrosion-proofing a metal substrate, comprising:

applying a bond coating to the substrate, the bond coating comprising at least one organic adhesion-conferring polymer[, wherein the at least one adhesion-conferring polymer comprises] consists essentially of at least one polybismaleimide selected from the group consisting of: (i) a homopolymer comprising a bismaleimide, (ii) a homopolymer comprising a maleimide-terminated oligomer, (iii) a homopolymer comprising a maleimide-terminated polymer, (iv) a copolymer comprising a bismaleimide, (v) a copolymer comprising a maleimide-terminated oligomer, and (vi) a copolymer comprising a maleimide-terminated polymer[, and (vii) a copolymer of an organic compound having a terminal functional group which can be polymerized with a maleimide residue, but which does not undergo a Diels-Alder reaction, and at least one of compounds (i)-(vi);] wherein the coating is applied from an aqueous solution, an organic solvent solution, a dispersion or an emulsion; and

subsequently stabilizing the bond coating on the substrate surface.

31. (Thrice amended) A method for corrosion-proofing a metal substrate, comprising:

(a) cleaning and de-greasing a substrate;

(b) applying a bond coating to the substrate, the bond coating comprising at least one organic adhesion-conferring polymer[, wherein the at least one adhesion-conferring polymer comprises] consists essentially of at least one polybismaleimide selected from the group consisting of: (i) a homopolymer comprising a bismaleimide, (ii) a homopolymer comprising a maleimide-terminated oligomer, (iii) a homopolymer comprising a maleimide-terminated polymer, (iv) a copolymer comprising a bismaleimide, (v) a copolymer comprising a maleimide-terminated oligomer, and (vi) a copolymer comprising a maleimide-terminated polymer[, and (vii) a copolymer of an organic compound having a terminal functional group which can be polymerized with a maleimide residue, but which does not undergo a Diels-Alder reaction, and at least one of compounds (i)-(vi)];

wherein the coating is applied from an aqueous solution, an organic solvent solution, a dispersion or an emulsion;

(c) stabilizing the bond coating on the substrate surface by heat or irradiation; and

(d) applying at least one paint coating on the substrate.--